

## NSF Light Source Panel Visit

### Tuesday Evening, March 25, 2008.

Time 6:30 pm Executive session, Rowe Room, Statler Hotel, Cornell Campus

Time 7:30 pm Dinner, Rowe Room, Statler Hotel, with Directors/University Officials.

#### Cornell:

Don Bilderback, CHESS Assoc. Director, Appl. & Eng. Phys.  
Joel Brock, G-line Director, Physics  
Bob Buhrman, Vice-Provost for Res., Appl. & Eng. Phys.  
Rick Cerione, MacCHESS PI, Chemistry & Molec. Medicine  
Ernie Fontes, CHESS Assis. Director  
Sol Gruner, CHESS Director, Phys.  
Quan Hao, MacCHESS Director, Appl. & Eng. Phys.  
Don Hartill, Phys.  
Bob Richardson, Phys.  
Maury Tigner, CLASSE Director, Phys.

#### Site Visitors:

Venkatesh Narayanamurti, Harvard University, Chair  
Hellen T. Edwards, Fermi Lab  
Michael L. Klein, University of Pennsylvania  
W. Carl Lineberger, University of Colorado, JILA  
Mary Jane Saunders, Cleveland State University  
Richard C. York, Michigan State University

Guebre Tessema, DMR, NSF  
Charles Bouldin, DMR, NSF

### Wednesday, March 26, 2008. 380 Wilson Synchrotron Lab

7:30 am Continental breakfast  
8:00 am Overview of Cornell synchrotron light source activities  
8:00 CLASSE overview. Sol Gruner  
8:15 CHESS overview. Ernie Fontes  
8:30 Students & Education. Joel Brock  
8:45 Accelerator projects overview. Georg Hoffstaetter  
9:10 Superconducting RF facility tour.  
9: 50 am Coffee Break  
10:05 am Tour of Wilson synchrotron facility, meeting students, staff, etc. Includes synchrotron, CHESS, ERL injector  
11:45 am Large facility management at Cornell. John Silcox, Maury Tigner, Dave Rice, Sol Gruner  
12:15pm Lunch with young faculty, 380 Wilson  
Ivan Bazarov, Assis. Prof. Phys.  
Ruth Collins, Assoc. Prof. Molec. Medicine

Brian Crane, Assoc. Prof. Chemistry  
Georg Hoffstaetter, Assoc. Prof. Phys.  
Ailong Ke, Assis. Prof. Molec. Biol. & Genetics  
Matthias Liepe, Assis. Prof. Phys.  
Lois Pollack, Assoc. Prof. Appl. & Eng. Phys.  
Kyle Shen, Assis. Prof. Phys.  
Uli Wiesner, Prof., Materials Sci. & Eng.

- 1:30 pm      Discussion with students & post-docs  
                  Buz Barstow, Grad Student, Appl. & Eng. Phys.  
                  Michael Ehrlichman, Grad Student, Phys.  
                  John Ferguson, Grad Student, Mater. Sci & Eng.  
                  Marianne Hromalik, Post-doc, Phys.  
                  Marleen Kamperman, Grad Student, Mater. Sci. & Eng.  
                  Lucas Koerner, Grad Student, Phys.  
                  Chris Mayes, Grad Student, Phys.  
                  Charlotte Pearson, Post-doc, Classics  
                  Olexandr Romanenko, Grad Student, Phys.
- 2:30 pm      Discussion with Cornell Administration.  
                  Provost Bidy Martin, Vice-Provost for Research Bob Buhrman
- 3:00 pm      Coffee
- 3:15 pm      Executive session
- 4:00 pm      Adjourn

**NSF Light Source Panel Visit**  
**Cornell University Participants**

**Cornell University students and postdocs:**

**Buz Barstow**, Graduate Student, Applied and Engineering Physics

*Concentration: PhD thesis pertains to the fluorescent protein molecule, Citrine*

**Michael Ehrlichman**, Graduate Student, Physics Dept.

*Concentration: Particle accelerator ion instabilities*

**John Ferguson**, Graduate Student, Materials Science and Engineering

*Concentration: Time resolved diffuse scattering during pulsed laser deposition*

**Marianne Hromalik**, Postdoc, Physics Dept.

*Concentration: X-ray detector development for LCLS and other projects*

**Marleen Kamperman**, Graduate Student, Materials Science and Engineering

*Concentration: Developed an easily controlled bottom-up approach towards nanostructured high-temperature ceramics in which block copolymer mesophases are used to template inorganic precursors.*

**Lucas Koerner**, Graduate Student, Physics Dept.

*Concentration: PAD x-ray detector development for LCLS and other projects*

**Chris Mayes**, Graduate Student, Physics Dept.

*Concentration: Particle accelerator linear and nonlinear particle optics*

**Charlotte Pearson**, Postdoc, Classics

*Concentration: Dendrochronology, dendrochemistry and geoarchaeology*

**Olexandr Romanenko**, Graduate Student, Physics Dept.

*Concentration: Superconducting radio-frequency (SRF)*

**Cornell University Faculty & Staff:**

**Ivan Bazarov**, Assistant Professor, Physics Dept.

*Research Interests: Production of extreme particle beams and development of new applications utilizing such beams.*

**Sergey Belomestnykh**, Senior Research Assoc, LEPP

*Research Interests: RF technology*

**Don Bilderback**, Associate Director CHESS and Adjunct Professor, Applied and Engineering Physics

*Research Interests: X-ray optics & x-ray technology*

**Joel Brock**, Director G-line and Professor, Applied Engineering and Physics

*Research Interests: Pulsed laser deposition, charge density waves, condensed matter*

**Bob Buhrman**, Vice-Provost for Research and Professor, Applied and Engineering Physics

*Research Interests: Nanomagnetism, nanostructures, condensed matter physics*

**Rick Cerione**, MacCHESS PI, Chemistry and Molecular Medicine

*Research Interests: Cell surface receptors*

**Ruth Collins**, Associate Professor, Molecular Medicine

*Research Interests: How chemical reactions of biology are organized within the cellular boundaries.*

**Brian Crane**, Associate Professor, Chemistry

*Research Interests: Understanding interactions among proteins, electrons and photons.*

**Darren Dale**, Staff Scientist, CHESS

*Research Interests: Pulsed laser deposition, x-ray imaging*

**Bruce Dunham**, Senior Research Associate, Project manager ERL Gun

*Research Interests: Photoinjectors*

**Ernie Fontes**, Assistant Director, CHESS

*Research Interests: X-ray technology, education & outreach*

**Sol Gruner**, Director, CHESS, Professor of Physics

*Research Interests: Soft condensed matter physics, biophysics, x-ray technology*

**Quan Hao**, MacCHESS Director, Adjunct Professor, Applied & Engineering Physics

*Research Interests: Macromolecular crystallography*

**Don Hartill**, Professor, Physics

*Research Interests: Accelerator physics*

**Georg Hoffstaetter**, Associate Professor, Physics

*Research Interests: Physics of beams; accelerator technology*

**Ailong Ke**, Assistant Professor, Molecular Biology & Genetics

*Research Interests: The biology of RNA*

**Matthias Liepe**, Assistant Professor of Physics

*Research Interests: Radio frequency superconductivity, accelerator physics*

**Biddy Martin**, Provost, Professor, German Studies

*Research Interests: Women's studies.*

**Matt Miller**, Professor, Mechanical and Aerospace Engineering

*Research Interests: Failure of metals*

**Dimitre Ouzounov**, Research Associate, LEPP

*Research Interests: Laser optics for ERLs*

**Ritchie Patterson**, Professor of Physics, Director of Graduate Studies

*Research Interests: Elementary particle physics, LHC*

**Lois Pollack**, Associate Professor, Applied Engineering and Physics

*Research Interests: Self-assembly/folding of macromolecules and conformational changes associated with biological function.*

**David Rice**, Senior Research Associate, LEPP

*Research Interests: Accelerator physics*

**Bob Richardson**, Professor, Physics

*Research Interests: Condensed matter physics*

**Kyle Shen**, Assistant Professor, Physics

*Research Interests: Utilizing momentum-resolved probes to study the electronic structure of complex quantum materials.*

**John Silcox**, Professor, Applied and Engineering Physics

*Research Interests: Condensed matter physics, electron microscopy*

**Maury Tigner**, Director, CLASSE, Professor of Physics

*Research Interests: Accelerator physics*

**Uli Wiesner**, Professor, Materials Science and Engineering

*Research Interests: Control of materials assembly at very small length scales, towards the development of novel functional materials.*

**Frank Wise**, Director, Applied Engineering and Physics and Professor

*Research Interests: Lasers & quantum optics*

**Arthur Woll**, Staff Scientist, CHESS

*Research Interests: Pulsed laser deposition, x-ray technology applied to the arts*